#### **Joint Claim Construction Chart**

*In Re: e.Digital Cases*, Case Nos. 13-cv-2897-H-BGS; 13-cv-2899-H-BGS; 13-cv-2914-H-BGS; 13-cv-2915-H-BGS; 13-cv-2938-H-BGS; 13-cv-2946-H-BGS

# **U.S. Patent No. 5,839,108 ("the '108 Patent")**<sup>1</sup>

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
Preamble	e.Digital contends that the	Defendants contend that the
	preamble is not limiting.	preamble is limiting.
Claim 1		
A method of memory management for a	Intrinsic Support:	Intrinsic Support: <sup>2</sup>
primary memory created from a non-		
volatile, long-term storage medium, said	<u>Claims</u> :	Claims: '108 patent, claim 1;
method enabling direct manipulation of	'108 patent: Claim 1	'445 patent, claims 1, 3, 5, 7, 8.
contiguous and non-contiguous discrete		
data segments stored therein by a file	'445 patent: Claims 1-25	Figures: '445 patent at Figs. 3A-
system, and comprising the steps of:		3C, 4-6, 7A, 7B.
	Figures:	
(a) creating the primary memory from a	'108 patent: Figs. 3, 4	Specification: '108 patent at
non-volatile, long-term storage medium,		3:34-43; '445 patent at 3:33-59,
wherein the primary memory comprises a	'445 patent: Figs. 3A, 3B, 3C,	4:53-55, 5:55-6:3, 7:62-8:4.
plurality of blocks in which the data segments	4, 5, 6, 7A, 7B, 8, 9, 10, 11	
are to be stored;		Other Intrinsic Support: 1997-

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As used herein, "'108 patent" refers to U.S. Patent No. 5,839,108, "'445 patent" refers to the parent of the '108 patent, U.S. Patent No. 5,787,445, and "'774 patent" refers to U.S. Patent No. 5,491,774 which is incorporated by reference by the '108 patent.

By presenting the '445 patent as intrinsic evidence in this Joint Claim Construction Chart, Defendants do not concede that the '108 patent may properly rely on the '445 patent to meet the written description and enablement requirements under 35 U.S.C. § 112. Defendants expressly reserve the right to argue that the '445 patent was not properly incorporated by reference by the '108 patent and that claim terms of the '108 patent are indefinite as a result. But to the extent the Court finds the claim terms of the '108 patent not indefinite, the '445 patent should be considered intrinsic evidence.

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
(b) coupling a cache memory to the primary memory, said cache memory providing	<u>Specification:</u> '108 patent: Abstract; Cols. 1:5-21; 1:45-51; 1:55-2:41; 3:19-22;	11-3 Resp. to Office Action (App. No. 08/612,772) at 8.
temporary and volatile storage for at least one of the data segments;	3:28-30; 3:34-43; 4:5-14; 8:52- 65; 10:57-63.	Extrinsic Support: Testimony / declaration(s) of Norbert P. Daberko and/or Richard K.
(c) writing a new data segment from the cache memory to the primary memory by linking	15; 3:33-46; 3:60-63; 4:40-44;	Davis.
said new data segment to a sequentially previous logical data segment by the following steps:	5:55-62; 6:22-36; 9:4-19:44; 23:34-40.	Impact of Proposed Construction on Merits of the Case: Finding the preamble to
(1) receiving the new data segment in the cache memory;	Impact of Proposed Construction on Merits of the Case: BDT does not believe the preamble is dispositive at this	be limiting would result in no infringement of the asserted claim by one or more Defendants.
(2) moving the new data segment from the cache memory to a next available space within primary memory such that the new data segment is stored in primary memory in non-used memory space;	time, even if Defendants' construction of the preamble as limiting is adopted.	
(3) identifying the previous logical data segment in primary memory;		

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
(4) creating a logical link between the		
previous logical data segment and the new		
data segment such that the logical link		
provides a path for sequentially accessing the		
data segments within the primary memory;		
(5) creating additional serial and logical links		
as subsequent new data segments are written		
to primary memory, said logical links		
providing the path for serially accessing the		
data segments regardless of contiguity of the		
data segments relative to each other within the		
primary memory; and		
(6) storing the data segments to primary		
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		
"primary memory"	e.Digital believes that this claim	"Main memory of a computer
	term should be construed	system, i.e., the main general-
Claim 1	together with the rest of the	purpose storage to which the
A method of memory management for a	limitation within which it is	microprocessor has direct
primary memory created from a non-	contained as set forth below.	access."

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
volatile, long-term storage medium, said		
method enabling direct manipulation of	To the extent the term is to be	Intrinsic Support:
contiguous and non-contiguous discrete data	construed separately, e.Digital	
segments stored therein by a file system, and	proposes the following	Claims: '108 patent, claim 1;
comprising the steps of:	construction: "addressable	'445 patent, claim 1.
	storage to which a computer	
(a) creating the <b>primary memory</b> from a	system's microprocessor has	Figures: '445 patent at Figs. 3A-
non-volatile, long-term storage medium,	direct access"	3C, 4, 5.
wherein the <b>primary memory</b> comprises a		
plurality of blocks in which the data segments	Intrinsic Support:	Specification: '445 patent at
are to be stored;		2:50-61, 3:15-22, 7:18-67.
	<u>Claims</u> :	
(b) coupling a cache memory to the <b>primary</b>	'108 patent: Claim 1	Other Intrinsic Support: 1995-
<b>memory</b> , said cache memory providing		07-18 Resp. to Office Action
temporary and volatile storage for at least one	'445 patent: Claims 1-25	(App. No. 08/229,731) at 8-11;
of the data segments;		e.Digital Corp. v. Pentax of
	Figures:	<i>Am.</i> , No. 9-cv-2578, Dkt. No.
(c) writing a new data segment from the cache	'108 patent: Figs. 3, 4	397, Markman Order at 13 (Jun.
memory to the <b>primary memory</b> by linking		28, 2011).
said new data segment to a sequentially	'445 patent: Figs. 3A, 3B, 3C,	
previous logical data segment by the	4, 5, 6, 7A, 7B, 8, 9, 10, 11	Extrinsic Support: Microsoft
following steps:		Press Computer Dictionary (2d
	Specification:	ed. 1994) (definitions of
(1) receiving the new data segment in the	'108 patent: Abstract; Cols. 1:5-	"primary storage," "RAM," and

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
cache memory;	21; 1:45-51; 1:55-2:41; 3:19-22;	"random access memory");
	3:28-30; 3:34-43; 4:5-14; 8:52-	Prentice Hall's Illustrated
(2) moving the new data segment from the	65; 10:57-63.	Dictionary of Computing (2d
cache memory to a next available space		ed. 1996) (definitions of
within <b>primary memory</b> such that the new	'445 patent: Abstract; Cols. 1:9-	"primary storage," "RAM," and
data segment is stored in <b>primary memory</b> in	15; 3:33-46; 3:60-63; 4:40-44;	"storage hierarchy"); Dictionary
non-used memory space;	5:55-62; 6:22-36; 9:4-19:44;	of Computing (4th ed. 1996)
	23:34-40.	(definitions of "primary
(3) identifying the previous logical data		memory" and "main memory
segment in <b>primary memory</b> ;	Extrinsic Support:	(main store; main storage;
		RAM; primary memory)");
(4) creating a logical link between the	Microsoft Press, Computer	testimony / declaration(s) of
previous logical data segment and the new	Dictionary (Second Ed., 1994):	Norbert P. Daberko and/or
data segment such that the logical link	"non-volatile memory,"	Richard K. Davis.
provides a path for sequentially accessing the	"internal storage," "primary	
data segments within the <b>primary memory</b> ;	storage," "storage," "storage	Impact of Proposed
	device," "RAM."	Construction on Merits of the
(5) creating additional serial and logical links		<u>Case</u> : A construction consistent
as subsequent new data segments are written	Macmillan, Webster's New	with Defendants' proposal
to <b>primary memory</b> , said logical links	World Dictionary of Computer	would result in no infringement
providing the path for serially accessing the	Terms (Fifth Ed., 1994):	of the asserted claim by one or
data segments regardless of contiguity of the	"primary storage," "nonvolatile	more Defendants.
data segments relative to each other within the	storage," "storage," "storage	
primary memory; and	device."	

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
(6) storing the data segments to <b>primary memory</b> in a manner consistent with an industry standard data storage format while retaining linking between data segments created in previous steps.	Houghton Mifflin, The American Heritage Dictionary of the English Language (Third Ed., 1996): "create"  Impact of Proposed Construction on Merits of the Case: e.Digital does not believe this claim term is dispositive at this time, even if Defendants' proposed construction is adopted.	
"creating the primary memory from a non-	"causing a portion or portions of	Indefinite, or in the alternative,
volatile, long-term storage medium,	a non-volatile long term storage	"dividing the non-volatile, long-
wherein the primary memory comprises a	medium, comprised of a	term memory into equal size
plurality of blocks in which the data	plurality of blocks in which the	blocks, each block being the
segments are to be stored"	data segments are to be stored,	smallest amount of data that can
segments are to be stored	to perform at least one of a	be read from or written to the
Claim 1	host's primary memory	memory in a single read or write
A method of memory management for a	functions"	operation"
primary memory created from a non-volatile,		of the state of th

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
long-term storage medium, said method	Intrinsic Support:	Intrinsic Support:
enabling direct manipulation of contiguous		
and non-contiguous discrete data segments	<u>Claims</u> :	Claims: '108 patent, claim 1;
stored therein by a file system, and	'108 patent: Claim 1	'445 patent, claim 1.
comprising the steps of:		
	'445 patent: Claims 1-25	Figures: '445 patent at Figs. 4-5.
(a) creating the primary memory from a		
non-volatile, long-term storage medium,	<u>Figures:</u>	Specification: '445 patent at
wherein the primary memory comprises a	'108 patent: Figs. 3, 4	Abstract, 4:19-26, 9:4-37, 10:6-
plurality of blocks in which the data		16.
segments are to be stored;	'445 patent: Figs. 3A, 3B, 3C,	
	4, 5, 6, 7A, 7B, 8, 9, 10, 11	Extrinsic Support: Testimony /
(b) coupling a cache memory to the primary		declaration(s) of Norbert P.
memory, said cache memory providing	Specification:	Daberko and/or Richard K.
temporary and volatile storage for at least one	'108 patent: Abstract; Cols. 1:5-	Davis.
of the data segments;	21; 1:45-51; 1:55-2:41; 3:19-22;	
	3:28-30; 3:34-43; 4:5-14; 8:52-	Impact of Proposed
(c) writing a new data segment from the cache	65; 10:57-63.	Construction on Merits of the
memory to the primary memory by linking		<u>Case</u> : An indefiniteness finding
said new data segment to a sequentially	'445 patent: Abstract; Cols. 1:9-	would invalidate the asserted
previous logical data segment by the	15; 3:33-46; 3:60-63; 4:40-44;	claim. A construction
following steps:	5:55-62; 6:22-36; 9:4-19:44;	consistent with Defendants'
	23:34-40.	alternative proposal would
(1) receiving the new data segment in the		result in no infringement of the

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
cache memory;	Extrinsic Support:	asserted claim by one or more
		Defendants.
(2) moving the new data segment from the	Microsoft Press, Computer	
cache memory to a next available space	Dictionary (Second Ed., 1994):	
within primary memory such that the new	"non-volatile memory,"	
data segment is stored in primary memory in	"internal storage," "primary	
non-used memory space;	storage," "storage," "storage	
	device," "RAM."	
(3) identifying the previous logical data		
segment in primary memory;	Macmillan, Webster's New	
	World Dictionary of Computer	
(4) creating a logical link between the	Terms (Fifth Ed., 1994):	
previous logical data segment and the new	"primary storage," "nonvolatile	
data segment such that the logical link	storage," "storage," "storage	
provides a path for sequentially accessing the	device."	
data segments within the primary memory;		
	Houghton Mifflin, The	
(5) creating additional serial and logical links	American Heritage Dictionary	
as subsequent new data segments are written	of the English Language (Third	
to primary memory, said logical links	Ed., 1996): "create"	
providing the path for serially accessing the		
data segments regardless of contiguity of the	Impact of Proposed	
data segments relative to each other within the	Construction on Merits of the	
primary memory; and	<i>Case</i> : e.Digital does not believe	

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
	adoption of its proposed	
(6) storing the data segments to primary	construction of this term will be	
memory in a manner consistent with an	dispositive. e.Digital's	
industry standard data storage format while	construction simply aims to	
retaining linking between data segments	define the claim limitation in	
created in previous steps.	accordance with the	
	specifications. If this claim	
	term is found indefinite as	
	proposed by Defendants, such	
	finding would be dispositive. If	
	the claim term is not found	
	indefinite and Defendants'	
	proposed construction is	
	adopted, e.Digital believes this	
	construction may potentially be	
	narrowing, but not necessarily	
	dispositive.	
"creating"	e.Digital believes that this claim	"Making or producing"
	term should be construed	
<u>Claim 1</u>	together with the rest of the	Intrinsic Support:
A method of memory management for a	limitation within which it is	
primary memory created from a non-volatile,	contained as set forth above.	Claims: '108 patent, claim 1;
long-term storage medium, said method		'445 patent, claim 1.
enabling direct manipulation of contiguous	To the extent the term is to be	

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
and non-contiguous discrete data segments	construed separately, e.Digital	Figures: '445 patent at Figs. 4-5.
stored therein by a file system, and	proposes that the term be	
comprising the steps of:	accorded its plain and ordinary	Specification: '445 patent at
	meaning.	Abstract, 4:19-26, 9:4-37, 10:6-
(a) <b>creating</b> the primary memory from a non-		16.
volatile, long-term storage medium, wherein	Intrinsic Support:	
the primary memory comprises a plurality of		<b>Extrinsic Support</b> : The Grosset
blocks in which the data segments are to be	<u>Claims</u> :	Webster Dictionary (1970
stored;	'108 patent: 1	Edition) (definition of "create");
		testimony / declaration(s) of
(b) coupling a cache memory to the primary	'445 patent: Claims 1-25	Norbert P. Daberko and/or
memory, said cache memory providing		Richard K. Davis.
temporary and volatile storage for at least one	<u>Figures:</u>	
of the data segments;	'108 patent: Figs. 3, 4	Impact of Proposed
		Construction on Merits of the
(c) writing a new data segment from the cache		<u>Case</u> : A construction consistent
memory to the primary memory by linking	4, 5, 6, 7A, 7B, 8, 9, 10, 11	with Defendants' proposal
said new data segment to a sequentially		would result in no infringement
previous logical data segment by the	Specification:	of the asserted claim by one or
following steps:	'108 patent: Abstract; Cols. 1:5-	more Defendants.
	21; 1:45-51; 1:55-2:41; 3:19-22;	
(1) receiving the new data segment in the	3:28-30; 3:34-43; 4:5-14; 8:52-	
cache memory;	65; 10:57-63.	

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
•	Construction	Construction
(2) moving the new data segment from the	'445 patent: Abstract; Cols. 1:9-	
cache memory to a next available space	15; 3:33-46; 3:60-63; 4:40-44;	
within primary memory such that the new	5:55-62; 6:22-36; 9:4-19:44;	
data segment is stored in primary memory in	23:34-40.	
non-used memory space;		
	Extrinsic Support:	
(3) identifying the previous logical data		
segment in primary memory;	Microsoft Press, Computer	
	Dictionary (Second Ed., 1994):	
(4) <b>creating</b> a logical link between the	"non-volatile memory,"	
previous logical data segment and the new	"internal storage," "primary	
data segment such that the logical link	storage," "storage," "storage	
provides a path for sequentially accessing the	device," "RAM."	
data segments within the primary memory;		
	Macmillan, Webster's New	
(5) <b>creating</b> additional serial and logical links	World Dictionary of Computer	
as subsequent new data segments are written	Terms (Fifth Ed., 1994):	
to primary memory, said logical links	"primary storage," "nonvolatile	
providing the path for serially accessing the	storage," "storage," "storage	
data segments regardless of contiguity of the	device."	
data segments relative to each other within the		
primary memory; and	Houghton Mifflin, The	
	American Heritage Dictionary	
(6) storing the data segments to primary	of the English Language (Third	

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
memory in a manner consistent with an	Ed., 1996): "create"	
industry standard data storage format while		
retaining linking between data segments	Impact of Proposed	
created in previous steps.	Construction on Merits of the	
	<u>Case</u> : e.Digital does not believe	
	this claim term is dispositive at	
	this time, even if Defendants'	
	proposed construction is	
	adopted.	11
"coupling a cache memory to the primary	e.Digital proposes that this	"Creating a removable,
memory, said cache memory providing	claim limitation and the terms	interchangeable electrical
temporary and volatile storage for at least	contained within it should be	connection between the cache
one of the data segments"	accorded its plain and ordinary	memory and the primary
Claim 1	meaning.	memory"
A method of memory management for a	Intrinsia Cunnort	Intrinsic Support:
primary memory created from a non-volatile,	Intrinsic Support:	<u>Intruisic Support</u> .
long-term storage medium, said method	Claims:	Claims: '108 patent, claims 1, 2,
enabling direct manipulation of contiguous	'108 patent: Claim 1	5; '445 patent, claim 1.
and non-contiguous discrete data segments	_	
stored therein by a file system, and	'445 patent: Claims 1, 2, 14, 15,	Figures: '108 patent at Figs. 1-4;
comprising the steps of:		'774 patent at Figs. 1-3, 6A, 6B.
	Figures:	
(a) creating the primary memory from a non-	'445 patent: Figs. 3A, 3B, 3C, 4	Specification: '108 patent at

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	<b>Defendants' Proposed</b>
	Construction	Construction
volatile, long-term storage medium, wherein		Abstract, 3:42-61, 5:14-23,
the primary memory comprises a plurality of	Specification:	8:34-37, 8:44-51, 10:38-52; '774
blocks in which the data segments are to be	'445 patent: Abstract; Cols.	patent at Abstract, 3:16-20,
stored;	3:40-43; 4:23-26; 4:40-44; 8:1-	2:52-54, 3:5-24, 4:14-18, 4:59-
	9; 8:61-64; 9:30-55; 23:34-40.	63.
(b) coupling a cache memory to the		
primary memory, said cache memory	Extrinsic Support:	Other Intrinsic Support: Order
providing temporary and volatile storage	Microsoft Press, Computer	Granting Request for Ex Parte
for at least one of the data segments;	Dictionary (Second Ed., 1994):	Reexamination of U.S. Patent
	"cache," "cache memory,"	No. 5,491,774 (Jan. 11, 2011) at
(c) writing a new data segment from the cache	"primary storage," "storage,"	4; 2011-09-20 Office Action in
memory to the primary memory by linking	"storage device."	Ex Partes Reexamination of
said new data segment to a sequentially		U.S. Patent No. 5,491,774 at 13-
previous logical data segment by the	Macmillan, Webster's New	15; 2012-04-02 Office Action in
following steps:	World Dictionary of Computer	Ex Partes Reexamination of
	Terms (Fifth Ed., 1994):	U.S. Patent No. 5,491,774 at 14-
(1) receiving the new data segment in the	"cache," "coupling," "primary	15; 1994-03-03 Office Action,
cache memory;	storage."	Paper No. 3 in Ex Partes
		Reexamination of U.S. Patent
(2) moving the new data segment from the	Impact of Proposed	No. 5,491,774 at 5; 2012-05-17
cache memory to a next available space	Construction on Merits of the	Resp. to Final Office Action in
within primary memory such that the new	<i>Case</i> : e.Digital does not believe	Ex Partes Reexamination of
data segment is stored in primary memory in	this claim term is dispositive at	U.S. Patent No. 5,491,774 at 20,
non-used memory space;	this time. Adoption of	29-30, 32-33; 1998-01-09

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	<b>Defendants' Proposed</b>
_	Construction	Construction
(3) identifying the previous logical data segment in primary memory;  (4) creating a logical link between the previous logical data segment and the new data segment such that the logical link provides a path for sequentially accessing the data segments within the primary memory;  (5) creating additional serial and logical links as subsequent new data segments are written to primary memory, said logical links providing the path for serially accessing the data segments regardless of contiguity of the data segments relative to each other within the primary memory; and	Defendants' proposed construction may potentially narrow the scope of the claims, but would not necessarily be dispositive.	_
(6) storing the data segments to primary memory in a manner consistent with an industry standard data storage format while retaining linking between data segments created in previous steps.		
"non-volatile, long-term storage medium"	e.Digital proposes that this	"Memory that holds its data

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
	claim term should be accorded	without the need for ongoing
Claim 1	its plain and ordinary meaning.	power support"
A method of memory management for a		
primary memory created from a <b>non-volatile</b> ,	Intrinsic Support:	Intrinsic Support:
long-term storage medium, said method		
enabling direct manipulation of contiguous	<u>Claims</u> :	Claims: '108 patent, claim 1;
and non-contiguous discrete data segments	'108 patent: Claim 1	'445 patent, claims 1, 13.
stored therein by a file system, and		
comprising the steps of:	'445 patent: Claims 1, 12	Figures: '445 patent at Figs. 3A-
		3C.
(a) creating the primary memory from a <b>non-</b>	Figures:	
volatile, long-term storage medium,	'445 patent: Figs. 3A, 3B, 3C	Specification: '445 patent at
wherein the primary memory comprises a		1:31-37, 8:1-9, 8:65-9:27.
plurality of blocks in which the data segments	Specification:	
are to be stored;	'108 patent: Abstract; Cols. 1:5-	Other Intrinsic Evidence: 1997-
	21; 1:45-51; 2:14-19; 2:46-50;	11-3 Resp. to Office Action
(b) coupling a cache memory to the primary	2:65-67; 3:35-38; 3:56-60; 4:5-	(App. No. 08/612,772) at 6.
memory, said cache memory providing	14; 4:54-57; 5:15-24; 8:44-51;	
temporary and volatile storage for at least one	10:57-63.	<b>Extrinsic Support</b> : Dictionary
of the data segments;		of Computing (4th ed. 1996)
	'445 patent: Abstract; Cols. 1:9-	(definitions of "nonvolatile
(c) writing a new data segment from the cache		memory"); Prentice Hall's
memory to the primary memory by linking	4:40-44; 8:4-9; 8:61-64; 23:34-	Illustrated Dictionary
said new data segment to a sequentially	40.	Computing (2nd ed. 1996)

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
previous logical data segment by the		(definition of "nonvolatile
following steps:	Extrinsic Support:	memory"); Microsoft Press
	Microsoft Press, Computer	Computer Dictionary (2nd ed.,
(1) receiving the new data segment in the	Dictionary (Second Ed., 1994):	1994) (definitions of
cache memory;	"non-volatile memory,"	"EEPROM" and "flash
	"storage," "storage device,"	memory"); testimony /
(2) moving the new data segment from the	"storage media."	declaration(s) of Norbert P.
cache memory to a next available space		Daberko and/or Richard K.
within primary memory such that the new	Macmillan, Webster's New	Davis.
data segment is stored in primary memory in	World Dictionary of Computer	
non-used memory space;	Terms (Fifth Ed., 1994):	Impact of Proposed
	"nonvolatile storage,"	Construction on Merits of the
(3) identifying the previous logical data	"storage," "storage device."	<u>Case</u> : A construction consistent
segment in primary memory;		with Defendants' proposal
	Impact of Proposed	would result in invalidity of the
(4) creating a logical link between the	Construction on Merits of the	asserted claim in view of the
previous logical data segment and the new	<i>Case</i> : e.Digital does not believe	prior art.
data segment such that the logical link	this claim term is dispositive at	
provides a path for sequentially accessing the	this time, even if Defendants'	
data segments within the primary memory;	proposed construction is	
	adopted.	
(5) creating additional serial and logical links		
as subsequent new data segments are written		
to primary memory, said logical links		

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
providing the path for serially accessing the		
data segments regardless of contiguity of the		
data segments relative to each other within the		
primary memory; and		
(6) storing the data segments to primary		
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		
"direct manipulation of contiguous and	e.Digital proposes that this	Indefinite, or in the alternative,
non-contiguous discrete data segments"	claim term should be accorded	"manipulation of contiguous and
	its plain and ordinary meaning.	noncontiguous data segments
Claim 1		directly in the primary memory
A method of memory management for a	Intrinsic Support:	through changes to data segment
primary memory created from a non-volatile,		headers without using a file
long-term storage medium, said method	<u>Claims</u> :	allocation table"
enabling direct manipulation of contiguous	'108 patent: Claim 1	
and non-contiguous discrete data segments		Intrinsic Support:
stored therein by a file system, and	'445 patent: Claims 1-6; 9-11;	
comprising the steps of:	15-18; 21-24.	Claims: '108 patent, claim 1;
		'445 patent, claim 1.
(a) creating the primary memory from a non-	Figures:	
volatile, long-term storage medium, wherein	'445 patent: Figs. 1-11	Figures: '445 patent at Figs. 3A-

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
the primary memory comprises a plurality of		3C, 5, 7A, 7B.
blocks in which the data segments are to be	Specification:	
stored;	'108 patent: 1:11-21; 1:47-1:51;	Specification: '445 patent at
	1:55-64; 2:7-13; 4:5-14; 8:52-	3:60-64, 5:55-6:18, 6:45-50,
(b) coupling a cache memory to the primary	65; 10:57-63.	7:6-25.
memory, said cache memory providing		
temporary and volatile storage for at least one	'445 patent: Cols. 2:50-61;	Other Intrinsic Evidence: 1997-
of the data segments;	4:40-44; 5:55-5:62; 6:45-19:44;	11-3 Resp. to Office Action
	23:34-40.	(App. No. 08/612,772) at 5-8.
(c) writing a new data segment from the cache		
memory to the primary memory by linking	Extrinsic Support:	<b>Extrinsic Support</b> : Testimony /
said new data segment to a sequentially	Microsoft Press, Computer	declaration(s) of Norbert P.
previous logical data segment by the	Dictionary (Second Ed., 1994):	Daberko and/or Richard K.
following steps:	"contiguous," "contiguous data	Davis.
	structure," "noncontiguous data	
(1) receiving the new data segment in the	structure," "discrete," "data	Impact of Proposed
cache memory;	segment," "segment,"	Construction on Merits of the
	"segmentation."	<u>Case</u> : An indefiniteness finding
(2) moving the new data segment from the		would invalidate the asserted
cache memory to a next available space	Macmillan, Webster's New	claim. A construction
within primary memory such that the new	World Dictionary of Computer	consistent with Defendants'
data segment is stored in primary memory in	Terms (Fifth Ed., 1994):	alternative proposal would
non-used memory space;	"manipulating," "contiguous	result in no infringement of the
	data structure," "sequential,"	asserted claim by one or more

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
(3) identifying the previous logical data	"sequential access," "sequential	Defendants.
segment in primary memory;	access storage device,"	
	"sequential data set,"	
(4) creating a logical link between the	"sequential device," "sequential	
previous logical data segment and the new	file organization," "sequential	
data segment such that the logical link	storage," "discrete."	
provides a path for sequentially accessing the		
data segments within the primary memory;	Impact of Proposed	
	Construction on Merits of the	
(5) creating additional serial and logical links	<u>Case</u> : e.Digital does not believe	
as subsequent new data segments are written	adoption of its proposed plain	
to primary memory, said logical links	and ordinary meaning	
providing the path for serially accessing the	construction of this term will be	
data segments regardless of contiguity of the	dispositive. If this claim term is	
data segments relative to each other within the	found indefinite as proposed by	
primary memory; and	Defendants, such finding would	
	be dispositive. If the claim term	
(6) storing the data segments to primary	is not found indefinite and	
memory in a manner consistent with an	Defendants' proposed	
industry standard data storage format while	construction is adopted,	
retaining linking between data segments	e.Digital believes this	
created in previous steps.	construction may potentially	
	narrow the scope of the claim,	
	but would not necessarily be	

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
	dispositive.	
"file system"	e.Digital proposes that this	Indefinite, or in the alternative,
	claim term should be accorded	"system to organize and keep
Claim 1	its plain and ordinary meaning.	track of files without using file
A method of memory management for a		allocation tables (memory
primary memory created from a non-volatile,	Intrinsic Support:	maps)"
long-term storage medium, said method		
enabling direct manipulation of contiguous	<u>Claims</u> :	Intrinsic Support:
and non-contiguous discrete data segments	'108 patent: Claim 1	
stored therein by a file system, and		Claims: '108 patent, claim 1;
comprising the steps of:	'445 patent: Claims 1-25	'445 patent, claim 1.
(a) creating the primary memory from a non-	<u>Figures:</u>	Figures: '445 Patent at Figs. 3A-
volatile, long-term storage medium, wherein	'445 patent: Figs. 5-11	3C, 5, 7A, 7B.
the primary memory comprises a plurality of		
blocks in which the data segments are to be	Specification:	Specification: '108 patent at
stored;	'108 patent: Abstract; 1:5-21;	3:34-43; '445 patent at 3:33-49,
	1:45-51; 1:27-30; 1:64-67; 2:	3:57-59, 8:33-9:3, 9:56-10:5.
(b) coupling a cache memory to the primary	26-32; 3:19-22; 3:28-30; 3:38-	
memory, said cache memory providing	40; 4:10-14; 8:25-65; 10:25-36;	Other Intrinsic Evidence: 1997-
temporary and volatile storage for at least one	10:57-63.	11-3 Resp. to Office Action
of the data segments;		(App. No. 08/612,772) at 5-8.
	'445 patent: Abstract; Cols.	
(c) writing a new data segment from the cache	3:33-3:64; 4:40-44; 4:66-5:25;	Extrinsic Support: Random

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
memory to the primary memory by linking	5:55-5:62; 6:51-19:44; 23:34-	House Personal Computer
said new data segment to a sequentially	40.	Dictionary (2nd ed. 1996)
previous logical data segment by the		(definitions of "file system" and
following steps:	File History:	"file management system");
	'445 patent: July 1, 1997 Office	testimony / declaration(s) of
(1) receiving the new data segment in the	Action at p. 5.	Norbert P. Daberko and/or
cache memory;		Richard K. Davis.
	Extrinsic Support:	
(2) moving the new data segment from the	Microsoft Press, Computer	Impact of Proposed
cache memory to a next available space	Dictionary (Second Ed., 1994):	Construction on Merits of the
within primary memory such that the new	"file system."	<u>Case</u> : An indefiniteness finding
data segment is stored in primary memory in		would invalidate the asserted
non-used memory space;	Impact of Proposed	claim. A construction
	Construction on Merits of the	consistent with Defendants'
(3) identifying the previous logical data	<i>Case</i> : e.Digital does not believe	alternative proposal would
segment in primary memory;	adoption of its proposed plain	result in no infringement of the
	and ordinary meaning	asserted claim by one or more
(4) creating a logical link between the	construction of this term will be	Defendants.
previous logical data segment and the new	dispositive. If this claim term is	
data segment such that the logical link	found indefinite as proposed by	
provides a path for sequentially accessing the	Defendants, such finding would	
data segments within the primary memory;	be dispositive. If the claim term	
	is not found indefinite and	
(5) creating additional serial and logical links	Defendants' proposed	

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
as subsequent new data segments are written	construction is adopted,	
to primary memory, said logical links	e.Digital believes this	
providing the path for serially accessing the	construction may potentially	
data segments regardless of contiguity of the	narrow the scope of the claim,	
data segments relative to each other within the	but would not necessarily be	
primary memory; and	dispositive.	
(6) storing the data segments to primary		
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		
"cache memory"	e.Digital proposes that this	Indefinite, or in the alternative,
	claim term be accorded its plain	"memory strictly used to
Claim 1	and ordinary meaning.	temporarily store a block of
A method of memory management for a		read/write data."
primary memory created from a non-volatile,	Intrinsic Support:	
long-term storage medium, said method		Intrinsic Support:
enabling direct manipulation of contiguous	<u>Claims</u> :	
and non-contiguous discrete data segments	'108 patent: Claim 1	Claims: '108 patent, claim 1;
stored therein by a file system, and		'445 patent, claim 1.
comprising the steps of:	'445 patent: Claims 1, 14, 15	
		Figures: '445 patent at Figs. 3A-
(a) creating the primary memory from a non-	Figures:	3C.

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
volatile, long-term storage medium, wherein	'445 patent: Figs. 3A, 3B, 3C,	
the primary memory comprises a plurality of	4.	Specification: '445 patent at 3:
blocks in which the data segments are to be		44-49, 4:23-26, 7:18-67, 8:18-
stored;	Specification:	26.
	'445 patent: Abstract; Cols.	
(b) coupling a <b>cache memory</b> to the primary	3:40-43; 4:23-26; 4:40-44; 8:1-	Other Intrinsic Support: 1997-
memory, said cache memory providing	9; 8:61-64; 9:30-55; 23:34-40.	11-3 Resp. to Office Action
temporary and volatile storage for at least one		(App. No. 08/612,772) at 5-8.
of the data segments;	Extrinsic Support:	
	Microsoft Press, Computer	<b>Extrinsic Support</b> : Newton's
(c) writing a new data segment from the	Dictionary (Second Ed., 1994):	Telecom Dictionary (11th ed.
cache memory to the primary memory by	"cache," "cache memory."	1996) (definitions of "cache"
linking said new data segment to a		and "cache memory");
sequentially previous logical data segment by	Macmillan, Webster's New	Dictionary of Computing (4th
the following steps:	World Dictionary of Computer	ed.) (definition of "cache (cache
	Terms (Fifth Ed., 1994):	memory)"); testimony /
(1) receiving the new data segment in the	"cache."	declaration(s) of Norbert P.
cache memory;		Daberko and/or Richard K.
	Impact of Proposed	Davis.
(2) moving the new data segment from the	Construction on Merits of the	
cache memory to a next available space	<u>Case</u> : e.Digital does not believe	Impact of Proposed
within primary memory such that the new	adoption of its proposed plain	Construction on Merits of the
data segment is stored in primary memory in	and ordinary meaning	<u>Case</u> : An indefiniteness finding
non-used memory space;	construction of this term will be	would invalidate the asserted

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
	dispositive. If this claim term is	claim. A construction
(3) identifying the previous logical data	found indefinite as proposed by	consistent with Defendants'
segment in primary memory;	Defendants, such finding would	alternative proposal would
	be dispositive. If the claim term	result in no infringement of the
(4) creating a logical link between the	is not found indefinite and	asserted claim by one or more
previous logical data segment and the new	Defendants' proposed	Defendants.
data segment such that the logical link	construction is adopted,	
provides a path for sequentially accessing the	e.Digital believes this	
data segments within the primary memory;	construction may potentially	
	narrow the scope of the claim,	
(5) creating additional serial and logical links	but would not necessarily be	
as subsequent new data segments are written	dispositive.	
to primary memory, said logical links		
providing the path for serially accessing the		
data segments regardless of contiguity of the		
data segments relative to each other within the		
primary memory; and		
(6) storing the data segments to primary		
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		
"logical data segment"	"logically related data segment"	Defendants contend that this

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
		term is improperly truncated
Claim 1	Intrinsic Support:	and, to the extent a phrase needs
A method of memory management for a		to be construed, it should be the
primary memory created from a non-volatile,	<u>Claims</u> :	claim term "previous logical
long-term storage medium, said method	'108 patent: Claim 1	data segment."
enabling direct manipulation of contiguous		
and non-contiguous discrete data segments	'445 patent: Claims 1-6; 9-11;	The construction of "previous
stored therein by a file system, and	15-18; 21-24.	logical data segment" is:
comprising the steps of:		indefinite, or in the alternative,
	<u>Figures:</u>	"data segment with a header that
(a) creating the primary memory from a non-	'445 Patent: Figs. 5, 6, 7A, 7B,	stores the physical location of
volatile, long-term storage medium, wherein	8, 9, 10, 11	the next logical data segment."
the primary memory comprises a plurality of		
blocks in which the data segments are to be	Specification:	Intrinsic Support:
stored;	'108 patent: 4:10-14; 6:15-26;	
	6:30-36; 10:57-63.	Claims: '108 patent, claim 1;
(b) coupling a cache memory to the primary		'445 patent, claim 1.
memory, said cache memory providing	'445 patent: Abstract; Cols.	
temporary and volatile storage for at least one	3:47-49; 3:60-3:64; 4:40-44;	<u>Figures:</u> '445 patent at Figs. 5,
of the data segments;	4:66-5:25; 11:12-19:44; 23:34-	7A, 7B.
	40.	
(c) writing a new data segment from the cache		Specification: '445 patent at
memory to the primary memory by linking	Impact of Proposed	4:27-40, 5:63-6:18, 11:1-12,
said new data segment to a sequentially	Construction on Merits of the	17:43-61.

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
previous logical data segment by the	<i>Case</i> : e.Digital does not believe	
following steps:	adoption of its proposed	Other Intrinsic Evidence: 1997-
	construction of this term will be	11-3 Resp. to Office Action
(1) receiving the new data segment in the	dispositive. e.Digital's	(App. No. 08/612,772) at 5-8.
cache memory;	proposed construction simply	
	attempts to define the term	<b>Extrinsic Support</b> : Testimony /
(2) moving the new data segment from the	according to the context of the	declaration(s) of Norbert P.
cache memory to a next available space	claim as a whole and as defined	Daberko and/or Richard K.
within primary memory such that the new	in the specifications. If this	Davis.
data segment is stored in primary memory in	claim term is found indefinite as	
non-used memory space;	proposed by Defendants, such	Impact of Proposed
	finding would be dispositive. If	Construction on Merits of the
(3) identifying the previous <b>logical data</b>	the claim term is not found	<i>Case</i> : An indefiniteness finding
<b>segment</b> in primary memory;	indefinite and Defendants'	would invalidate the asserted
	proposed construction is	claim. A construction
(4) creating a logical link between the	adopted, e.Digital believes this	consistent with Defendants'
previous <b>logical data segment</b> and the new	construction may potentially	alternative proposal would
data segment such that the logical link	narrow the scope of the claim,	result in no infringement of the
provides a path for sequentially accessing the	but would not necessarily be	asserted claim by one or more
data segments within the primary memory;	dispositive.	Defendants.
(5) creating additional serial and logical links		
as subsequent new data segments are written		
to primary memory, said logical links		

# **Joint Claim Construction Chart**

e.Digital's Proposed	Defendants' Proposed
Construction	Construction
Divided and a second state of the	In the Conitron and in the section and
	Indefinite, or in the alternative,
	"a pointer written to the previous logical data segment
its plant and ordinary meaning.	that points to the physical
Intrinsic Support:	location of the new data
	segment"
<u>Claims</u> :	
'108 patent: Claim 1	Intrinsic Support:
_ · · · · ·	Claims: '108 patent, claim 1;
15-18; 21-24.	'445 patent, claim 1.
Figures:	Figures: '445 patent at Figs. 5,
	7A, 7B.
	e.Digital proposes that this claim term should be accorded its plain and ordinary meaning.  Intrinsic Support:  Claims:

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
the primary memory comprises a plurality of	8, 9, 10, 11	
blocks in which the data segments are to be		Specification: '445 patent at
stored;	Specification:	4:27-40, 5:63-6:18, 11:1-12,
	'108 patent: 4:10-14; 6:15-26;	17:43-61.
(b) coupling a cache memory to the primary	6:30-36; 10:57-63.	
memory, said cache memory providing		Other Intrinsic Evidence: 1997-
temporary and volatile storage for at least one	'445 patent: Abstract; Cols.	11-3 Resp. to Office Action
of the data segments;	3:47-49; 3:60-3:64; 4:40-44;	(App. No. 08/612,772) at 5-8.
	4:66-5:25; 11:12-19:44; 23:34-	
(c) writing a new data segment from the cache	40.	<b>Extrinsic Support</b> : Dictionary
memory to the primary memory by linking		of Computing (4th ed. 1996)
said new data segment to a sequentially	Extrinsic Support:	(definition of "link"); Microsoft
previous logical data segment by the	Microsoft Press, Computer	Press Computer Dictionary (2d
following steps:	Dictionary (Second Ed., 1994):	ed. 1994) (definitions of "link,"
	"logical file," "offset,"	"linked list," and "pointer");
(1) receiving the new data segment in the	"pointer," "data segment,"	Newton's Telecom Dictionary
cache memory;	"segment," "segmentation."	(11th ed. 1996) (definition of
		"link" and "logical link");
(2) moving the new data segment from the	Macmillan, Webster's New	Markman Order in Bedrock
cache memory to a next available space	World Dictionary of Computer	Computer, Techs. LLC v.
within primary memory such that the new	Terms (Fifth Ed., 1994):	Softlayer Techs., Inc., No. 6:09-
data segment is stored in primary memory in	"logical data design," "logical	cv-269-LED-JDL (E.D. Tex.
non-used memory space;	format," "pointer," "counter."	Jan. 10, 2011) at 7 (construction
		for "a linked list to store and

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
(3) identifying the previous logical data	Impact of Proposed	provide access to records");
segment in primary memory;	Construction on Merits of the	testimony / declaration(s) of
	<i>Case</i> : e.Digital does not believe	Norbert P. Daberko and/or
(4) creating a logical link between the	adoption of its proposed plain	Richard K. Davis.
previous logical data segment and the new	and ordinary meaning	
data segment such that the logical link	construction of this term will be	Impact of Proposed
provides a path for sequentially accessing the	dispositive. If this claim term is	Construction on Merits of the
data segments within the primary memory;	found indefinite as proposed by	<i>Case</i> : An indefiniteness finding
	Defendants, such finding would	would invalidate the asserted
(5) creating additional serial and logical links	be dispositive. If the claim term	claim. A construction
as subsequent new data segments are written	is not found indefinite and	consistent with Defendants'
to primary memory, said logical links	Defendants' proposed	alternative proposal would
providing the path for serially accessing the	construction is adopted,	result in no infringement of the
data segments regardless of contiguity of the	e.Digital believes this	asserted claim by one or more
data segments relative to each other within the	construction may potentially	Defendants.
primary memory; and	narrow the scope of the claim,	
	but would not necessarily be	
(6) storing the data segments to primary	dispositive.	
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		
"a path for sequentially accessing the data	e.Digital proposes that this	Indefinite, or in the alternative,
segments within the primary memory"	claim term should be accorded	"a linked list used instead of a

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
	its plain and ordinary meaning.	file allocation table (memory
Claim 1		map) for sequentially accessing
A method of memory management for a	Intrinsic Support:	data segments within the
primary memory created from a non-volatile,		primary memory"
long-term storage medium, said method	<u>Claims</u> :	
enabling direct manipulation of contiguous	'108 patent: Claim 1	Intrinsic Support:
and non-contiguous discrete data segments		
stored therein by a file system, and	'445 patent: Claims 1-6; 9-11;	Claims: '108 patent, claim 1;
comprising the steps of:	15-18; 21-24.	'445 patent, claim 1.
(a) creating the primary memory from a non-	Figures:	Figures: '445 patent at Figs. 5,
volatile, long-term storage medium, wherein	'445 Patent: Figs. 5, 6, 7A, 7B,	7A, 7B.
the primary memory comprises a plurality of	8, 9, 10, 11	
blocks in which the data segments are to be		Specification: '445 patent at
stored;	Specification:	3:47-49, 4:27-40, 6:3-36, 15:8-
	'108 patent: 4:10-14; 6:15-26;	21, 16:15-27.
(b) coupling a cache memory to the primary	6:30-36; 10:57-63.	
memory, said cache memory providing		Other Intrinsic Evidence: 1997-
temporary and volatile storage for at least one	'445 patent: Abstract; Cols.	11-3 Resp. to Office Action
of the data segments;	3:47-49; 3:60-3:64; 4:40-44;	(App. No. 08/612,772) at 5-8.
	4:66-5:25; 11:12-19:44; 23:34-	
(c) writing a new data segment from the cache	40.	Extrinsic Support: Dictionary
memory to the primary memory by linking		of Computing (4th ed. 1996)
said new data segment to a sequentially	Extrinsic Support:	(definitions of "linked list" and

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
previous logical data segment by the	Microsoft Press, Computer	"sequential access"); Newton's
following steps:	Dictionary (Second Ed., 1994):	Telecom Dictionary (11th ed.
	"access," "logical file,"	1996) (definitions of
(1) receiving the new data segment in the	"sequential access," "pointer,"	"sequential" and "sequential
cache memory;	"offset," "data segment,"	access"); Markman Order in
	"segment," "segmentation."	Bedrock Computer, Techs. LLC
(2) moving the new data segment from the		v. Softlayer Techs., Inc., No.
cache memory to a next available space	Macmillan, Webster's New	6:09-cv-269-LED-JDL (E.D.
within primary memory such that the new	World Dictionary of Computer	Tex. Jan. 10, 2011) at 7
data segment is stored in primary memory in	Terms (Fifth Ed., 1994):	(construction for "a linked list to
non-used memory space;	"logical data design," "logical	store and provide access to
	format," "pointer," "counter."	records"); testimony /
(3) identifying the previous logical data		declaration(s) of Norbert P.
segment in primary memory;	Impact of Proposed	Daberko and/or Richard K.
	Construction on Merits of the	Davis.
(4) creating a logical link between the	<u>Case</u> : e.Digital does not believe	
previous logical data segment and the new	adoption of its proposed plain	Impact of Proposed
data segment such that the logical link	and ordinary meaning	Construction on Merits of the
provides a path for sequentially accessing	construction of this term will be	<u>Case</u> : An indefiniteness finding
the data segments within the primary	dispositive. If this claim term is	would invalidate the asserted
memory;	found indefinite as proposed by	claim. A construction
	Defendants, such finding would	consistent with Defendants'
(5) creating additional serial and logical links	be dispositive. If the claim term	alternative proposal would
as subsequent new data segments are written	is not found indefinite and	result in no infringement of the

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
to primary memory, said logical links	Defendants' proposed	asserted claim by one or more
providing the path for serially accessing the	construction is adopted,	Defendants.
data segments regardless of contiguity of the	e.Digital believes this	
data segments relative to each other within the	construction may potentially	
primary memory; and	narrow the scope of the claim,	
	but would not necessarily be	
(6) storing the data segments to primary	dispositive.	
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		
"industry standard data storage format"	e.Digital already seeks to	"Format in which data is stored
	construe the term "data storage	that conforms to an industry
Claim 1	format" and does not believe	standard."
A method of memory management for a	that "industry standard" requires	
primary memory created from a non-volatile,	construction. To the extent the	Intrinsic Support:
long-term storage medium, said method	Court requires a construction	
enabling direct manipulation of contiguous	for "industry standard data	Claims: '108 patent, claim 1;
and non-contiguous discrete data segments	storage format," e.Digital	'445 patent, claim 1.
stored therein by a file system, and	proposes that "industry	
comprising the steps of:	standard" has a plain and	<u>Figures:</u>
	ordinary meaning and the	
(a) creating the primary memory from a non-	phrase should be construed	Specification: '445 patent at
volatile, long-term storage medium, wherein	simply as "industry standard file	8:47-50; '108 patent at Abstract,

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
the primary memory comprises a plurality of	system"	3:19-21, 10:53-56.
blocks in which the data segments are to be		
stored;	Intrinsic Support:	<b>Extrinsic Support</b> : Testimony /
		declaration(s) of Norbert P.
(b) coupling a cache memory to the primary	<u>Claims</u> :	Daberko and/or Richard K.
memory, said cache memory providing	'108 patent: 1	Davis.
temporary and volatile storage for at least one		
of the data segments;	<u>Figures:</u>	Impact of Proposed
	'108 patent: 3, 4	Construction on Merits of the
(c) writing a new data segment from the cache		<u>Case</u> : A construction consistent
memory to the primary memory by linking	Specification:	with Defendants' proposal
said new data segment to a sequentially	'108 patent: Abstract; 1:5-21;	would result in no infringement
previous logical data segment by the	1:27-30; 1:45-51; 1:64-67; 2:	of the asserted claim by one or
following steps:	26-32; 3:19-22; 3:28-30; 3:38-	more Defendants.
	40; 4:10-14; 8:34-65; 10:57-63.	
(1) receiving the new data segment in the		
cache memory;	'445 patent: Cols. 4:40-44;	
	8:38-60; 23:34-40.	
(2) moving the new data segment from the		
cache memory to a next available space	File History:	
within primary memory such that the new	'445 patent: July 1, 1997 Office	
data segment is stored in primary memory in	Action at p. 5.	
non-used memory space;		
	Extrinsic Support:	

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
(3) identifying the previous logical data	Microsoft Press, Computer	
segment in primary memory;	Dictionary (Second Ed., 1994):	
	"file system."	
(4) creating a logical link between the		
previous logical data segment and the new	Impact of Proposed	
data segment such that the logical link	Construction on Merits of the	
provides a path for sequentially accessing the	<u>Case</u> : e.Digital does not believe	
data segments within the primary memory;	adoption of either party's	
	proposed construction of this	
(5) creating additional serial and logical links	term will be dispositive.	
as subsequent new data segments are written		
to primary memory, said logical links		
providing the path for serially accessing the		
data segments regardless of contiguity of the		
data segments relative to each other within the		
primary memory; and		
(6) storing the data segments to primary		
memory in a manner consistent with an		
industry standard data storage format		
while retaining linking between data segments		
created in previous steps.		
"data storage format"	"file system"	Defendants already seek to
		construe the claim term

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
Claim 1	Intrinsic Support:	"industry standard data storage
A method of memory management for a		format" and contend no
primary memory created from a non-volatile,	Claims:	construction for this term is
long-term storage medium, said method	'108 patent: 1	necessary.
enabling direct manipulation of contiguous		
and non-contiguous discrete data segments	Figures:	To the extent the Court
stored therein by a file system, and	'108 patent: 3, 4	nonetheless requires a
comprising the steps of:		construction for "data storage
	Specification:	format," the term should be
(a) creating the primary memory from a non-	'108 patent: Abstract; 1:5-21;	construed as "plain meaning,
volatile, long-term storage medium, wherein	1:27-30; 1:45-51; 1:64-67; 2:	i.e., file format in which data is
the primary memory comprises a plurality of	26-32; 3:19-22; 3:28-30; 3:38-	stored."
blocks in which the data segments are to be	40; 4:10-14; 8:34-65; 10:57-63.	
stored;		Intrinsic Support:
	'445 patent: Cols. 4:40-44;	
(b) coupling a cache memory to the primary	8:38-60; 23:34-40.	Claims: '108 patent, claim 1;
memory, said cache memory providing		'445 patent, claim 1.
temporary and volatile storage for at least one	File History:	
of the data segments;	'445 patent: July 1, 1997 Office	Figures:
	Action at p. 5.	
(c) writing a new data segment from the cache		Specification: '445 patent at
memory to the primary memory by linking	Extrinsic Support:	8:47-50; '108 patent at Abstract,
said new data segment to a sequentially	Microsoft Press, Computer	3:19-21, 10:53-56.
previous logical data segment by the	Dictionary (Second Ed., 1994):	

# **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
following steps:	"file system."	<b>Extrinsic Support</b> : Testimony /
		declaration(s) of Norbert P.
(1) receiving the new data segment in the	Impact of Proposed	Daberko and/or Richard K.
cache memory;	Construction on Merits of the	Davis.
	<u>Case</u> : e.Digital does not believe	
(2) moving the new data segment from the	adoption of either party's	Impact of Proposed
cache memory to a next available space	proposed construction of this	Construction on Merits of the
within primary memory such that the new	term will be dispositive.	<i>Case</i> : Defendants contend this
data segment is stored in primary memory in		term need not be construed in
non-used memory space;		light of the construction of the
		term "industry standard data
(3) identifying the previous logical data		storage format." To the extent
segment in primary memory;		the Court construes this term, a
		construction consistent with
(4) creating a logical link between the		Defendants' proposal would
previous logical data segment and the new		result in no infringement of the
data segment such that the logical link		asserted claim by one or more
provides a path for sequentially accessing the		Defendants.
data segments within the primary memory;		
(5) creating additional serial and logical links		
as subsequent new data segments are written		
to primary memory, said logical links		
providing the path for serially accessing the		

## **Joint Claim Construction Chart**

Disputed Claim of '108 Patent	e.Digital's Proposed	Defendants' Proposed
	Construction	Construction
data segments regardless of contiguity of the		
data segments relative to each other within the		
primary memory; and		
(6) storing the data segments to primary		
memory in a manner consistent with an		
industry standard data storage format while		
retaining linking between data segments		
created in previous steps.		